CLAIMS

1. A computer program product, tangibly embodied on an information carrier, for navigating user interface elements of a computer program application, the product comprising instructions operable to cause data processing apparatus to:

5   detect a navigation key press of a navigation key, the navigation key having a group identifier;

identify a selected group of user interface elements associated with the group identifier; and

shift input focus to a user interface element in the selected group based on the

10   navigation key.

2. The product of claim 1, wherein:

the navigation key is a forward navigation key or a backward navigation key; and shifting input focus to a user interface element comprises shifting input focus to a next user interface element in the selected group if the navigation key is a forward navigation key, and

15   shifting input focus to a previous user interface element in the selected group if the navigation key is a backward navigation key.

3. The product of claim 1, wherein the user interface elements have associated text labels, and wherein the user interface elements associated with the group identifier are user interface elements having an associated text label with a first character that matches the group

20   identifier.

4. The product of claim 2, wherein a character matches a group identifier if both are the same character regardless of character case.

5. The product of claim 2, wherein a character matches a group identifier if both are the same character in the same case.

25   6. The product of claim 1, wherein the user interface elements have associated text labels, the product further comprising instructions to:

group the user interface elements into groups based on the first character of the associated text label of the elements at application run time.

7. The product of claim 6, wherein group instructions to group the user interface elements into groups based on the first character of the associated text label comprise instructions to:

group only the user interface elements in a current screen of the application into groups based on the first character of the associated text label.

8. The product of claim 1, wherein:

the forward navigation key is a combination of one or more forward modifier keys and the group identifier; and

the backward navigation key is a combination of one or more backward modifier keys and the group identifier.

9. A computer program product, tangibly embodied on an information carrier, for a software application having user interface elements, the product comprising instructions operable to cause data processing apparatus to:

detect a sequence of one or more navigation key presses of navigation keys, each navigation key having a group identifier, each navigation key being a forward navigation key or a backward navigation key;

generate a navigation string from the sequence of one or more group identifiers for the one or more navigation keys; and

shift input focus to a user interface element identified by the navigation string.

10. The product of claim 9, wherein instructions to detect a sequence of one or more navigation key presses comprise instructions to:

detect a sequence of forward navigation key presses, the sequence having a first navigation key press and a last navigation key press;

initialize the navigation string when the first navigation key press is detected;

start a time out interval with each forward navigation key press; and

determine the last navigation key press as the key press after which no forward navigation key presses are detected within the time out interval.

11. The product of claim 9, wherein instructions to detect a sequence of one or more navigation key presses comprise instructions to:

    detect a sequence of backward navigation key presses, the sequence having a first navigation key press and a last navigation key press;

5   initialize the navigation string when the first navigation key press is detected;

    start a time out interval with each backward navigation key press; and

    determine the last navigation key press as the key press after which no backward navigation key presses are detected within the time out interval.

12. The product of claim 9, wherein the user interface elements have an order, and

10 instructions to shift input focus to a user interface element comprise instructions to:

    shift input focus to a next user interface element having a text label starting with the same characters as the characters in the navigation string, if the navigation key is a forward navigation key; and

    shift input focus to a previous user interface element having a text label starting with

15 the same characters as the characters in the navigation string, if the navigation key is a backward navigation key.

13. A computer program product, tangibly embodied on an information carrier, tangibly embodied on an information carrier, for providing activation keys for user interface elements of a computer program application, the product comprising instructions operable to cause

20 data processing apparatus to:

    detect an ensemble of sequential activation key presses, each activation key comprising a character, thereby detecting a sequence of characters;

    identify a matching activation user interface element by finding an activation user interface element having a label matching the sequence of characters; and

25   perform an action associated with the matching activation user interface element.

14. The product of claim 13, wherein instructions to detect an ensemble comprise instructions to:

    detect a sequence of one or more characters that uniquely identifies an activation user interface element.

15. The product of claim 14, wherein the sequence of one or more characters is a sequence of identical group identifiers.

16. The product of claim 13, wherein instructions to detect an ensemble comprise instructions to:

5   detect one or more sequential activation key presses entered by a user within a time threshold.

17. The product of claim 13, wherein:

      the pressing and releasing of an activation modifier key delimits the activation key presses in the ensemble.

10   18. A computer implemented method for navigating user interface elements of a computer program application, the method comprising:

      detecting a navigation key press of a navigation key, the navigation key having a group identifier;

      identifying a selected group of user interface elements associated with the group

15 identifier; and

      shifting input focus to a user interface element in the selected group based on the navigation key.

19. The method of claim 18, wherein:

      the navigation key is a forward navigation key or a backward navigation key; and

20 shifting input focus to a user interface element comprises shifting input focus to a next user interface element in the selected group if the navigation key is a forward navigation key, and shifting input focus to a previous user interface element in the selected group if the navigation key is a backward navigation key.

20. The method of claim 18, wherein the user interface elements have associated text labels,

25 and wherein the user interface elements associated with the group identifier are user interface elements having an associated text label with a first character that matches the group identifier.

21. The method of claim 18, wherein the user interface elements have associated text labels, the method further comprising:

grouping the user interface elements into groups based on the first character of the associated text label of the elements at application run time.

5   22. The method of claim 18, wherein:

the forward navigation key is a combination of one or more forward modifier keys and the group identifier; and

the backward navigation key is a combination of one or more backward modifier keys and the group identifier.

10   23. A computer implemented method, for a software application having user interface elements, comprising:

detecting a sequence of one or more navigation key presses of navigation keys, each navigation key having a group identifier, each navigation key being a forward navigation key or a backward navigation key;

15   generating a navigation string from the sequence of one or more group identifiers for the one or more navigation keys; and

shifting input focus to a user interface element identified by the navigation string.

24. The method of claim 23, wherein detecting a sequence of one or more navigation key presses comprises:

20   detecting a sequence of forward navigation key presses, the sequence having a first navigation key press and a last navigation key press;

initializing the navigation string when the first navigation key press is detected;

starting a time out interval with each forward navigation key press; and

determining the last navigation key press as the key press after which no forward

25   navigation key presses are detected within the time out interval.

25. The method of claim 23, wherein detecting a sequence of one or more navigation key presses comprises:

 detecting a sequence of backward navigation key presses, the sequence having a first navigation key press and a last navigation key press;

5 initializing the navigation string when the first navigation key press is detected;

  starting a time out interval with each backward navigation key press; and

  determining the last navigation key press as the key press after which no backward navigation key presses are detected within the time out interval.

26. The method of claim 23, wherein the user interface elements have an order, and shifting
10 input focus to a user interface element comprises:

  if the navigation key is a forward navigation key, shifting input focus to a next user interface element having a text label starting with the same characters as the characters in the navigation string; and

  if the navigation key is a backward navigation key, shifting input focus to a previous
15 user interface element having a text label starting with the same characters as the characters in the navigation string.

27. A computer implemented method providing activation keys for user interface elements of a computer program application, the method comprising:

  detecting an ensemble of sequential activation key presses, each activation key
20 comprising a character, thereby detecting a sequence of characters;

  identifying a matching activation user interface element by finding an activation user interface element having a label matching the sequence of characters; and

  performing an action associated with the matching activation user interface element.

28. The method of claim 27, wherein detecting an ensemble comprises:

25 detecting a sequence of one or more characters that uniquely identifies an activation user interface element.

29. The method of claim 28, wherein the sequence of one or more characters is a sequence of identical group identifiers.

30. The method of claim 27, wherein detecting an ensemble comprises:

    detecting one or more sequential activation key presses entered by a user within a time threshold.

31. The method of claim 27, wherein:

5   the pressing and releasing of an activation modifier key delimits the activation key presses in the ensemble.